UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,473	03/16/2006	Josef Buechler	510.1140	3261

23280 7590 09/04/2007

DAVIDSON, DAVIDSON & KAPPEL, LLC
485 SEVENTH AVENUE, 14TH FLOOR
NEW YORK, NY 10018

EXAMINER	
LY, HIEN QUANG	
ART UNIT	**PAPER NUMBER**
3662	

MAIL DATE	DELIVERY MODE
09/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/537,473	BUECHLER ET AL.	
	Examiner	Art Unit	
	Hien Ly	3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/03/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim **12** is rejected under 35 U.S.C. 102(b) as being anticipated by **Gresham ('6,587,072)**.

Regarding **claim 12**, Gresham discloses a radar device having a sensor and a transmitter configured to transmit data simultaneously operable for a communication. See FIG.1 (" T_x 30"). Column 1, line 24-33 and column 4, line 45-48.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim **13** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gresham** as applied to **claim 12** above, and further in view of **Hill ('4,743,910)**.

Regarding **claim 13**, Gresham discloses a pulse radar having a predefined transmission/reception spectrum with a transmission frequency range. See FIG.1 (" FM modulation and f_0 correction 11, microwave source 10, and pulse former 13"). Column 1, line 24-33 and column 6, line 34-45.

Gresham fails to disclose a notch filter configured to selectively frequency range subrange containing spectral component of a sensing signal within the transmission frequency range.

However, Hill discloses a notch filter configured to selectively frequency range subrange containing spectral component of a sensing signal within the transmission frequency range. See FIG.7 (" a notch filter 64"). Column 9, line 27-38.

It would have been obvious to modify Gresham to include a notch filter in teaching of Hill in order to efficiently adjust the frequency of the filtering notch to filter out the first rectangular wave clutter signal regardless from what range the clutter is reflected.

5. Claims **14-15, 21, and 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gresham** as applied to **claim 12** above, and further in view of **Lisle ('5,418,536)**.

Regarding **claims 14, 21, and 24**, Gresham fails to disclose a pulse radar having a predefined transmission/reception spectrum, a transmission frequency range for the transmission of data being in a peripheral region of the predefined transmission/reception spectrum.

However, Lisle discloses a pulse radar having a predefined transmission/reception spectrum, a transmission frequency range for the transmission of data being in a peripheral region of the predefined transmission/reception spectrum. See FIG.3-4. Column 3, line 7-16.

It would have been obvious to modify Gresham to include a predefined transmission/reception spectrum and a transmission range in teaching of Lisle in order to efficiently generate an output signal characteristically representative of a predetermined frequency spectrum of an input signal.

Regarding **claim 15**, this claim is a design choice of the peripheral region in an expected way of implementing the combination of Gresham and Lisle with no new or unexpected result.

6. Claims **16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gresham** in view of **Lisle** as applied to claim **13** above, and further in view of **Caspers ('6,507,730)**.

Regarding **claim 16**, Gresham in view of Lisle fail to disclose the transmission frequency range including a plurality of individual frequency bands, each of for the transmission of data form different data class.

However, Caspers discloses the transmission frequency range including a plurality of individual frequency bands, each of for the transmission of data form different data class. See FIG.2 (" spectrum 250, frequency band 201, 202, a single data frequency"). Column 3, line 15-35.

It would have been obvious to modify Gresham in view of Lisle to include a plurality of individual frequency bands, each of for the transmission of data form different data class in teaching of Caspers in order to efficiently combine speech and data device.

Regarding **claim 17**, Gresham in view of Lisle fail to disclose the difference data classes including at least one of emergency data log data and communication data.

However, Caspers inherently teaches the difference data classes including at least on of emergency data log data and communication data. See FIG.2 (" spectrum 250, frequency band 201, 202, a single data frequency"). Column 3, line 15-35.

It would have been obvious to modify Gresham in view of Lisle to include the difference data classes including at least one of emergency data log data and communication data in teaching of Caspers in order to efficiently combine speech and data device.

7. Claim **18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gresham** as applied to **claim 12** above, and further in view of **Wren (5,014,340)** and **Takeuchi ('2002/0122500)**

Regarding **claim 18**, Gresham fails to disclose a transmitter including amplitude modulation for emergency data and PSK modulation for the transmission of communication data and log data.

However, Wren discloses a transmitter including an amplitude modulation for the emergency data. See column 5, line 48-53.

It would have been obvious to modify Gresham to include an amplitude modulation for the emergency data in teaching of Wren in order to efficiently three signal in sequential signals.

Wren fails to disclose PSK modulation for the transmission of communication data and log data.

However, Takeuchi discloses PSK modulation for the transmission of communication data and log data. See FIG.1 (" a transmitter 10 and a communication channel 20"). Page 2, paragraph 0025.

It would have been obvious to modify Gresham and Wren to include PSK modulation for the transmission of communication data and log data in teaching of Takeuchi in order to efficiently separate the signal into real part and an imaginary part.

8. Claim **20** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gresham** as applied to claim **12** above, and further in view of **Miller ('7,065,125).**

Regarding **claim 20**, Gresham fails to disclose a receiver configured to receive a communication data signal and feeding the communication data to a demodulation device.

However, Miller discloses a receiver configured to receive a communication data signal and feeding the communication data to a demodulation device. See FIG. 11 (" receiver 1100, demod controller 1108, demod 1110, and data handling system 1112"). Column 9, line 6-12.

It would have been obvious to modify Gresham to include a receiver configured to receive a communication data signal and feeding the communication data to a demodulation device in teaching of Miller in order to efficiently improve multiple access collision performance as compared to SA/CDMA systems.

9. Claims **19, 22,** and **23** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gresham** as applied to claim **12** above, and further in view of **Knoop ('7,015,805).**

Regarding claims **19 and 23**, Gresham fails to disclose a vehicle having radar as claimed.

However, Knoop discloses a vehicle having radar as claimed. See abstract.

It would have been obvious to modify Gresham to include a vehicle having radar as claimed in teaching of Knoop in order to efficiently control device of a vehicle during a brake operation.

Regarding **claim 22**, Gresham fails to discloses a radar device system comprising a plurality systems configured to sense its respective surroundings simultaneously exchange data with another of the plurality of radar system.

However, Knoop discloses a radar device system comprising a plurality systems configured to sense its respective surroundings simultaneously exchange data with another of the plurality of radar system. See column 6, line 55-65.

It would have been obvious to modify Gresham to include a radar device system comprising a plurality systems configured to sense its respective surroundings

simultaneously exchange data with another of the plurality of radar system in teaching of Knoop in order to efficiently control device of a vehicle during a brake operation.

10. Claim **22** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Gresham** as applied to claim **12** above, and further in view of **Furst ('6,338,011).**

Regarding **claim 22**, Gresham fails to discloses a radar device system comprising a plurality systems configured to sense its respective surroundings simultaneously exchange data with another of the plurality of radar system.

However, Furst discloses a radar device system comprising a plurality systems configured to sense its respective surroundings simultaneously exchange data with another of the plurality of radar system. See FIG.1 (" radars 1,2, and 3"). Column 4, line 28-44.

It would have been obvious to modify Gresham to include a radar device system comprising a plurality systems configured to sense its respective surroundings simultaneously exchange data with another of the plurality of radar system in teaching of Furst in order to efficiently provide users with accurate and timely vehicle telemetry information from different sensor source.

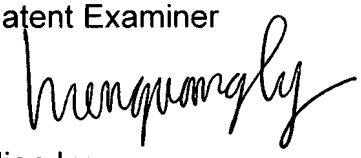
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Ly whose telephone number is 571-270-1326. The examiner can normally be reached on M-F: 7:00am - 4:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS H. TARCZA can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Patent Examiner



Hien Ly

July 18, 2007

THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600